SONY
make.believe

DSR-PD175P

1/3-inch 3 Exmor CMOS Professional DVCAM Camcorder

Class Leading Standard Definition Handheld Camcorder

The DSR-PD175P is simply the best standard definition handheld camcorder ever produced by Sony. It uses the same chassis as the state-of-the-art HVR-Z5E HDV Camcorder introduced in 2008 with many of the same advanced features, including the all-new high performance Sony G-Lens which combines a ClearVid array and advanced Exmor image-processing technology for class leading picture quality and low light performance.

The weight distribution and control layout of this chassis has set new ergonomic standards for handheld operation, while operational flexibility is further enhanced by support for the HVR-MRC1K Compact Flash Solid State recorder. In every respect, the DSR-PD175P is a natural successor to the legendary DSR-PD170P Camcorder for customers who need the highest performance and latest technology but don't currently have a requirement for High Definition.

DVCAM is the global standard for professional Standard Definition acquisition introduced by Sony as a higher performance, more reliable version of consumer DV while retaining full compatibility. Its advantages are further extended by a comprehensive product range, including Master Series VTRs tailored to broadcast requirements. Typical DVCAM applications range from wedding videography to corporate video and broadcast television. It is the ultimate ubiquitous digital broadcast and professional tape format.

All Sony Professional DVCAM Camcorders come with 2 years PrimeSupport at no extra cost. This means unique extra services - such an operational phone call support, 'anywhere collection' and 7-day repair - for twice as long. If your equipment is mission critical, register with PrimeSupport to receive the support you need.*

*PrimeSupport is included with all DVCAM camcorders purchased in the EU, Norway and Switzerland.

This product comes with the full PrimeSupport package. That's fast, hassle-free repairs, a helpline offering expert technical advice, and a free loan unit while yours is repaired. Plus the peace of mind that Sony is looking after your equipment – and your business.

Features

Sony's Exclusive High-performance G Lens

Discover the exceptional optical performance of Sony's G Lens. This sophisticated lens incorporates Sony's unique optical technology and unparalleled quality control. Moreover, it's been optimised to perfectly complement the camcorder's advanced image sensor and image-processing technology, thus expanding your shooting possibilities.

Express yourself more fully with the utmost precision of Sony's G Lens.

Major 'G' Lens Features on the DSR-PD175P

- The camcorder's 29.5mm wide-angle, 20x optical zoom 'G' Lens offers a field of view that's ideal for many shooting situations, ranging from broad landscape shots to close-up shots where it is difficult to obtain sufficient distance from the subject.
- Two ED (Extra-low Dispersion) glass elements reduce the chromatic aberrations caused by differences in light refraction to minimise colour fringing. The advanced 10-group, 15-element lens structure also includes three compound aspheric lenses for images that are crisp and clear, even when shooting at a high zooming ratio.
- Advanced optical lens technology enables Sony's Exmor Sensor system realise sharper images with higher resolution and less noise, even when shooting in very low light.
- The six-blade iris diaphragm is almost circular, which allows operators to incorporate creative background blur into their shots for beautiful visual effects.

Natural-touch Lens Operation

The ergonomic layout of the zoom, focus and iris control rings makes operation of these three functions possible with just one hand.

The zoom function can be controlled by any of the following:

- The lens barrel ring
- The lever at the lens grip
- The lever on the camera handle

A high-speed zoom mode is also available. The digital extender system increases the zoom ratio to approximately 30x.

The iris control ring can be customised via the menu to:

- Select and control the iris or the exposure
- Open and close iris direction

The exposure function is ideal for varied shooting environments that range from very dark to very bright, allowing easy one-handed control using single-ring operation.

Sony's Super SteadyShot system (optical) helps you achieve a stable picture, even when camera handling is unsteady.

Three built-in ND (Neutral Density) filters - 1/4, 1/16 and 1/64 - help to vary the depth of field with iris control.

Cutting-edge Imaging System With Exmor Technology

The DSR-PD175P boasts cutting-edge features including unique Exmor technology which maximises the potential of the camcorder's imaging system. This includes the same column-parallel A/D conversion and dual noise-cancelling method used in Sony's top-of-the-line camera models. Multiple A/D (analogue to digital) converters on each pixel row convert analogue signals to digital as soon as they are generated, unlike traditional technology that only has one A/D converter on each chip.

Exmor technology helps eliminate the influence of external noise, which can often enter the signal chain during transfer to the A/D converter. As a result, you get high-quality digital signals with extremely low noise.

By adopting this groundbreaking technology, the Exmor Sensor system enables the DSR-PD175P to achieve a low light sensitivity of just 1.5 lux (At 1/25 shutter, auto iris and auto gain).

Progressive Scan Mode

The DSR-PD175P provides SD-quality 25p footage. The 25p image captured by the sensor system is recorded as an interlaced signal by dividing each frame into two fields. This enables compatibility with current editing and monitoring equipment that only accept interlaced signals, while maintaining the quality of the 25p image.

Progressive scan mode is suitable for feature films, documentaries and music videos, where the content is required to have the filmic look.

Picture Profile

Up to six different picture set-ups, including gamma and colour settings, can be registered in the memory as a Picture Profile™. This labour-saving function allows operators to easily recall customised picture set-ups for various shooting conditions. It is also useful for matching footage shot at different times or for multi-camera operation.

Smooth Slow Rec

The Smooth Slow Rec function of the DSR-PD175P enables smooth slow-motion playback by capturing images 4x faster than normal (200 fields/s). In this mode, quad-speed images are captured for six seconds, stored in the built-in buffer memory, and then recorded to tape (in either DVCAM or DV format) as slow-motion pictures lasting 24 seconds.

This quad-speed image capture is the fastest speed available on any compact handheld camcorder.

Smooth Slow Rec is ideal for sports or nature photography, where the action can be viewed more easily in slow motion, and opens up many creative possibilities.

Shot Transition Function

The Shot Transition™ function allows for smooth automatic scene transitions. After you have programmed a shot's START and END point settings (e.g., for zoom, focus, iris, gain, shutter speed and white balance) and pressed the start button, a smooth picture transition takes place over the duration of the shot by automatically calculating the intermediate setting values.

Transition types can be selected from a choice of LINEAR, SOFT STOP and SOFT TRANS, and transition time can be set from 3 to 90 seconds.

DVCAM/DV Selectable Recording

The DSR-PD175P adopts the DVCAM format, which is the worldwide standard SD format for professional handheld camcorders.

If you require a longer recording time, the DSR-PD175P is also capable of recording and playing back DV format signals (SP mode only).

Assignable Features

The DSR-PD175P provides up to seven ASSIGN buttons for quick access to frequently used functions suitable for variable shooting conditions. Some default functions are pre-assigned by name.

The assignable functions are AE Shift, Back Light, Colour Bars, Digital Extender, End Search, Expanded Focus, Fader, Focus Macro, Hyper Gain, Index Mark, Marker, Peaking, Photo, Picture Profile, Push Auto Iris, REC Review, Ring Rotate Direction, Shot Transition, Smooth Slow REC, Spot Light, Steady Shot, TC Reset and Zebra.

XtraFine LCD Panel

The DSR-PD175P is equipped with a 3.2-inch-type widescreen XtraFine™ LCD panel on the front of its handle. This has a high resolution of approximately 921,000 pixels, which allows for easier focus adjustments. It can also display virtually 100% of the recorded picture area at a colour temperature of approximately 6500K.

XtraFine EVF

The 0.45-inch-type XtraFine EVF (Electronic View Finder) has approximately 1,227,000 pixels and three independent LEDs for red, green and blue colours. This technology allows users to monitor objects with remarkable colour reproduction accuracy and high resolution*.

The EVF has a choice of colour or black-and-white display modes. It also displays virtually 100% of the picture area at a colour temperature of approximately 6500K.

* When the camcorder is panned quickly, or when an object on the screen moves quickly, the R/G/B primary colours may be seen on the object in the EVF momentarily

InfoLITHIUM L Series Battery Compatibility

The DSR-PD175P uses the same L series batteries as the DSR-PD170P, so you can use your existing chargers and batteries

Versatile Audio Input Selection

The DSR-PD175P offers a versatile choice of audio inputs. It features a newly designed high-quality built-in stereo microphone, as well as two XLR audio input channels for connecting to either professional microphones or an external-line audio source. A 48V microphone power source can also be supplied.

By adjusting the INPUT ASSIGN switch located on the side panel of the DSR-PD175P, you can easily assign the two audio input channels to either the built-in stereo microphone or an external-line audio source, or dedicate one channel to each and record them separately or mixed.

When assigned to one channel, the built-in stereo microphone acts as a wide-directional monaural microphone.

On-handle Zoom Lever and Rec. Start/Stop Button

In order to facilitate zoom control and recording operation during low-angle shooting, an additional zoom lever and a rec. start/stop button have been added to the carrying handle. The rec. start/stop button has a hold function to prevent accidental operation.

The three-position slide switch located on the side of the handle lets users select the zoom control type from FIX, VAR and OFF. In FIX mode, zoom speed is determined by the speed setting selected in the menu, where eight speeds are available. In VAR mode, zoom speed can be adjusted manually using the zoom lever.

HYBRID Solution With HVR-MRC1K

The DSR-PD175P is ready for HYBRID DVCAM/DV operation, when connected to the optional HVR-MRC1K Memory Recording Unit via an i.LINK connector. In HYBRID operation, you can simultaneously record video footage to both a tape and a standard CompactFlash (CF) card.

Three recording options:

- Synchronous recording
- Relay recording
- HVR-MRC1K-only recording

For user convenience, the DSR-PD175P can display status information of the HVR-MRC1K on its LCD. This status information includes:

- Connection status
- REC status
- Remaining CF recording time

The recording time on a 16-GB CF card* in DVCAM and DV format is approximately 72 minutes.

* At least 133x speed and 2-GB capacity is required.

One-touch Clip-type Microphone Holder

A one-touch clip-type microphone holder makes it easy to attach and remove the microphone for quick storage.

Digital Still Camera Function With Memory Stick Duo

The Memory Photo function allows the camera to be switched to progressive scan mode for capturing still images. Files can be recorded on Memory Stick Duo™ media in a choice of two sizes: 1080x810 pixels (4:3) or 1440x810 pixels (16:9).

Benefits

Class-leading picture quality

Sony's 'G' Lens features unique optical technology, precisely optimised to complement the camcorder's advanced image-processing technology to deliver exceptional performance and expand your shooting possibilities. Set yourself apart from the competition with this exceptional camcorder.

Enhanced Creativity

The DSR-PD175P sets new standards for Standard Definition handheld camcorders with advanced

creative features including a 25p Progressive Scan mode, Smooth Slow Recording and up to six independent Picture Profiles for a variety of different camera set-ups.

Proven Workflow

DVCAM is the world's leading professional standard definition format - widely supported, easy to work with and highly reliable. You don't need the latest generation software, computer or large amounts of storage to work quickly and efficiently with the DSR-PD175P.

Ideal Design for Handheld Operation

Sony has responded to customer feedback to create the ideal handheld camcorder chassis with an ergonomically designed body-weight balance and a carefully planned button layout that reduces operator fatigue. Improved protection for audio settings and independent rings for zoom, focus and iris demonstrate this attention to detail.

Affordability

DVCAM media is widely available and ideal not just for acquisition but low cost archival purposes as well. Sony DVCAM hardware also retains compatibility with ubiquitous consumer DV media. In addition, despite a wide range of advanced features, the DSR-PD175P has been designed for the same entry-level price range as its predecessor model - the DSR-PD170P.

Technical Specifications

General	
Mass	2.2 kg (4 lb 14 oz) (with Lens hood, Lens cover,large eyecup) 2.7 kg (5 lb 15 oz) (with Lens hood, Lens cover,large eyecup, NP-F970 battery)
Dimension (W x H x D)	169 x 188 x 401 mm (6 3/4 x 7 1/2 x 15 3/4 inch) (including protrusions w/o gripbelt, w/ hood, w/ large eye-cup)
Power requirements	DC 8.4 V (Battery) / DC 7.2 V (AC adapter)
Power consumption	Approx. 6.0 W (LCD OFF and LCD viewfinder ON)
Operating temperature	0 to +40 °C (+32 to +104 °F)
Storage temperature	-20 to +60 °C (-4 to +140 °F)
Battery operating time	Approx. 475 min. (LCD OFF and LCD viewfinder ON) with NP-F970 battery
Recording format	Video: DVCAM/DV (SP) PAL Audio: Linear PCM (2ch, 16-bit, 48-kHz / 2ch, 12-bit, 32-kHz)
Recording frame rate	DVCAM/DV: 576/50i
Recording/Playback time	DV (SP): Approx. 63 min. with PHDVM-63DM DigitalMaster tape DVCAM: Approx. 41min. with PHDVM-63DM DigitalMaster tape

Lens	
Zoom ratio	Sony G Lens, 20x (optical), 1.5x Digital Extender
Focal length	f = 4.1 to 82.0 mm (equivalent to f = 29.5 to 590 mm at 16:9 mode f = 36.1 to 722 mm at 4:3 mode on 35 mm lens)
Iris	F1.6 to F3.4
Focus	AF/MF selectable, 800 mm to infinity (MACRO OFF), 10 mm to infinity (MACRO ON, Wide), 800 mm to infinity (MACRO ON, Tele)
Image stabilizer	ON/OFF selectable, shift lens
Filter diameter	72 mm

Camera Section	
Imaging device	3-chip 1/3-inch type Exmor CMOS with ClearVid pixel array
Effective picture elements Approx.	1,037,000 pixels with ClearVid array
Built-in optical filters	Clear, 1/4, 1/16, 1/64
Minimum illumination	1.5 lx (auto gain, auto iris, 1/25 shutter)
Shutter speed	Auto, Manual 50i/25p: 1/3 - 1/10000 sec.
Slow Shutter (SLS)	1/3, 1/6, 1/12, 1/25 sec.
Slow & Quick Motion function	200 fields/s (fixed) as improved Smooth Slow Rec
White balance	Auto, one-push auto (A/B positions), indoor (3200 K), outdoor (5800K)
Gain	AGC, -6, -3, 0, 3, 6, 9, 12, 15, 18, 21 dB

Inputs/Outputs	
DC input	Power code (DK-215)
Remote	LANC (Stereo mini-mini jack (ø2.5 mm) (x 1))
Audio input	XLR 3-pin (female) (x 2), line/mic/mic +48 V selectable
Composite output	RCA Type (x 1) via A/V multi connector
S-Video output	Mini-Din 4-pin (x 1) via A/V multi connector (optional VMC-15FS is required.)
Audio output	RCA type (CH-1,CH-2) via A/V multi connector

i.LINK	IEEE1394, 4-pin (x 1), DV stream input/output, S400
Headphone output	Stereo mini jack (ø3.5 mm) (x 1)

Monitoring	
Viewfinder	0.45 inch-type approx. 1,226,880 dots (852 x 3[RGB] x 480), 16:9 aspect ratio
Built-in LCD monitor	3.2 inch-type, XtraFine LCD, approx. 921,600 dots, hybrid type, 16:9 aspect ratio

Other	
Built-in Microphone	Stereo microphone
Media Type	miniDV tape (x 1)

Supplied Accessories	
Supplied Accessories AC-L100 AC adaptor (x 1)	
A/V Composite Connecting Cable (x 1)	
Lens hood with Lens cover (x 1)	
Large size eye-cup (x 1)	
RMT-831 wireless remote commander (x 1)	
Lithium battery (CR2025) (x 1)	
Operating instructions (CD-ROM) (x 1)	
Printed operating instructions	

Accessories

Batteries and Power Supplies

2NP-F970/B

Info-Lithium Battery Twin Pack

Lights

HVL-LBPA

LED Battery Video Light

Cases

LCS-BP1BP

Soft Backpack Style Carrying Case

LCS-G1BP

Soft Carry Case

Support Plans

PrimeSupport Plus BC1

1-Year Additional Cover for Broadcast and Pro A/V Products

Remote Controls

RM-1000BP

Remote Commander

RM-1BP

LANC Remote Commander

Viewfinders

SH-L32WBP

LCD Hood

Lenses and Lens Adaptors

VCL-HG0872K

Wide Conversion Lens

Tripods and Supports

VCT-1BP

Bracket For Camera Rear Mount

VCT-SP1BP

Extendable Monopod Camcorder Support System

VCT-PG11RMB

Tripod

VCT-SP2BP

Multi-function Camcorder Shoulder Support